



http://www.gendersexualityitaly.com

g/s/i is an annual peer-reviewed journal which publishes research on gendered identities and the ways they intersect with and produce Italian politics, culture, and society by way of a variety of cultural productions, discourses, and practices spanning historical, social, and geopolitical boundaries.

Title: New Challenges for Human Reproduction: "Cross-Border Reproductive Care" and "Social Egg

Freezing'

Journal Issue: gender/sexuality/italy, 5 (2018)

Author: Lia Lombardi

Publication date: August 2018

Publication info: gender/sexuality/italy, "Invited Perspectives"

Permalink: http://www.gendersexualityitaly.com/12-new-challenges-for-human-reproduction-cross-

border-reproductive-care-and-social-egg-freezing

Author Bio: Lia Lombardi is Adjunct professor in Sociology and Sociology of Health and Medicine at University of Milan; senior researcher and project manager at Fondazione ISMU, Health and Welfare Department. Gender, Health, and Migration are the main fields of her studies, with special attention on Mediterranean countries. She is member of ESA RN16 (Sociology of Health and Illness) board and member of SISS (Società Italiana di Sociologia della Salute) board. For the ISMU Foundation, she currently is scientific leader and coordinator of two international projects (1. PROVIDE - PRoximity On VIolence: Defence and Equity. JUST/2016/Action grants; 2. SWIM - Safe Women in Migration. Strengthen GBV protection for migrant and asylum seeker women. JUST/2016/Action grants).

Abstract: This article investigates the practices of ART (Assisted Reproductive Technology) through a sociological approach, with an eye to the political and legal issues relating to the process of the medicalization of human reproduction. It focuses on the most recent challenges in this field: "cross-border reproductive care" and "social egg freezing". These two issues are analysed by looking at both the European and the Italian context, highlighting differences, contradictions and inequalities with regard to legal frameworks, social policies and people's access to ARTs. The study will thus consider: a) some theoretical approaches on the relationship between technology and human reproduction; b) the reproduction of gender and social inequalities through the reproductive technology market; c) the exploitation of the reproductive body of poorer women; d) the increased tendency to solve social problems using medical tools and approaches.

Keywords: human reproduction, technology, gender, ART, egg freezing.

Copyright information

g/s/i is published online and is an open-access journal. All content, including multimedia files, is freely available without charge to the user or his/her institution and is published according to the Creative Commons License, which does not allow commercial use of published work or its manipulation in derivative forms. Content can be downloaded and cited as specified by the author/s. However, the Editorial Board recommends providing the link to the article (not sharing the PDF) so that the author/s can receive credit for each access to his/her work, which is only published online.



This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License

New Challenges for Human Reproduction: "Cross-Border Reproductive Care" and "Social Egg Freezing"

LIA LOMBARDI

The analysis of the technological reproductive process does not only involve the biological body but also the social and cultural body, expressed through sexuality, parenthood and social, generational and gender relations.

Since the 1960s we have witnessed a process of progressive separation between sexuality and procreation: with the increased use of contraceptives sexuality has become independent from reproduction, while during the second half of the 1970s reproduction has become tendentially independent from sexuality. The existence of such techniques, by stirring imagination, encourages different ways to procreate, raise and take care of children (for example single and homosexual parents). We can thus argue that the advent of ART (Assisted Reproductive Technology) highlights three issues:

- 1. personal and physical relationships to "make" children become more and more obsolete;
- 2. there is a desire to bring to light what women's womb has hidden for years;
- 3. reproduction is separated from the body.

Assisted procreation therefore generates a detachment of the couple from bodily practices and traditional relational strategies linked to procreation. The "artificial" family, no longer based on fertile sexuality—which can be made of a "real" father (the sperm donor), a "scientific" father (the doctor, who replaces the infertile sexual intercourse with a fertile medical act), a "carrying" or "donor" mother—would reduce the social dimension of parenthood to the benefit of biological meanings, which carry with them all legitimation of parenthood. Practices such as artificial insemination with donor sperm or surrogate maternity would not be socially legitimate if they were not carried out in a neutral and aseptic medical environment, and they would be considered adulterous and incestuous. The presence of a doctor gives this kind of transaction the status of a medical act rather than of illegal sexual behaviour; medicine becomes a regulator of social behaviours. Reproductive technology is also characterized by a paradox: if on the one hand it calls into question physical and blood kinship, on the other it founds its legitimation upon such link, moving filiation "from the social to the individual register." Bodies and relationships thus disappear, and seem to become mere means of reproduction. The aim is the product of conception, the embryo, the foetus, the "child in your arms." The embryo/foetus/child is objectivized and it paradoxically acquires corporeality and rights before it is born, since it is a product of science and therefore separated and separable from the maternal body: the latter disappears in order to emerge as a mere container for the embryo/foetus, who has legal status.2

Along with this process comes the expropriation of reproduction from the body, represented by dissociation, objectivation and interchangeability:

1. Dissociation: between procreation and sexual intercourse; between biological parenthood and filiation (i.e. sperm and ovum donation, surrogacy); between the organs and functions of the female reproductive apparatus, which leads to a break up of the maternal function; dissociation of the paternal function which gives way to biologically contestable social fathers and to biological fathers who are not socially recognised; dissociation between the mother and the foetus; dissociation between the time of conception and the start of pregnancy. In this respect, In Vitro Fertilization (IVF), hidden under

¹ An expression which indicates what some doctors in Italy promise to deliver to the couple (the customer), after a long and insecure period of ART. In Italian the expression is "Bambino in braccio."

² The legal rights of the embryo are stated in Article 1 of the Italian Law 40. See *Norme in materia di procreazione medicalmente assistita* 2004 (Italy), http://www.camera.it/parlam/leggi/04040l.htm.

the umbrella term of "assisted procreation", is the focal point which transforms the human reproduction representation.³

- 2. The objectification of the body and its functions emerges from the alienation of reproductive functions and organs. The medicine evaluation criteria aim to the functioning of the organs, excluding the body and the person.
- 3. Finally, the interchangeability of organs (the ovum of a woman inserted into the womb of another woman) and of functions (the gestation of an embryo produced by someone else) are seen as a threat to the integrity of women's bodies. By this we mean the complexity of women's existence, both individual and social, which has possible serious repercussions on the social and relational interaction of individuals.⁴

Alongside these critical views on reproductive technologies, others provide a positive evaluation of the invasion and/or technological replacement of women's bodies, which is thus subtracted to social duties considered indefeasible. Donna Haraway introduces a new variation in the relationship between the body and the machine, which overcomes old divisions and identifications with regard to gender and other dimensions. 5 She argues that the cyborg myth stems from the constructive encounter between body and machine: the word "cyborg" is made of "cyber" and "organism" and means cybernetic organism, indicating a mix of flesh and technology which characterises the body, modified by clutches of hardware, prostheses and other devices. 6 As a consequence, the search for identity is replaced by a search for affinity, which overtakes the phase that made us look for an "us" to be defined and defended, in order to open up unknown opportunities for communication. According to Haraway, the various critiques of the political system and scientific culture, including the feminist ones, still depend on the idea of hierarchical dichotomies which have characterised Western thought since Aristotle. It is nonsense to think of our condition in dichotomic terms: we need to construct a world of relationships without identities, we need to propose a new vision of the self, and the cyborg is the self that needs to be elaborated. Communication technologies and biotechnologies are the main tools for the reconstruction of our bodies. These tools incorporate and impose new social relationships for women all over the world. The author here replaces a dichotomic vision with an image which is ideological and reticular and suggests the profusion of spaces and identities and the permeability of borders in the personal and in the political body.⁷

With reference to women's relationship with technology, Rosy Braidotti maintains that:

We need to understand that this dimension belongs to us and that starting from its implosion it is u possible to draw different perspectives, by creatively contributing from within to the invention of new universes of signification and of other symbolic orders where technology is not an instrument of power but of satisfaction [of needs].⁸

³ It is important to say that surrogacy is not allowed in Italy and in many other european countries. Surrogacy is permittend in UK, Grece and Ireland, albeit with many restictions. Antonella Piga, "Leggi e norme sulla PMA: il panorama legislative europeo," in *La procreazione medicalmente assistita e le sue sfide. Generi, Tecnologie e Disuguaglianze,* eds. Lia Lombardi and Silvia De Zordo (Milano: FrancoAngeli, 2013), 111-128.

⁴ Lia Lombardi, "Reproductive technology in Italy between gender policy and inequality. Can we speak of 'social infertility'?," *About Gender International Journal of Gender Studies* 5, no. 9 (2016): 1-20, accessed August 8 2018, DOI: 10.15167/2279-5057/ag.2016.5.9.366.

⁵ Donna Haraway, Manifesto Cyborg. Donne, tecnologie e biopolitiche del corpo (Milano: Feltrinelli, 1995).

⁶ Ibid., 11.

⁷ Ibid., 68.

⁸ Rosi Braidotti, Madri, mostri, macchine (Roma: Manifesto Libri 1996), 33.

But, can we really argue that the body-machine union is a tool that can satisfy needs, freedom of choice and the construction of equalities precisely because it is neutral and abstract, free of bodily ties? We can find some answers to these questions reflecting on two of the new challenges for human reproduction: the "cross border reproductive care" and the "social egg freezing."

European paths. Between local and global

Since 1978—the year when Louise Brown, the first baby conceived in a test-tube by English doctors Edward and Steptoe, was born - it is estimated that five million children have been born in Europe through assisted reproduction technology (ART). Globally, Europe has the highest number of ART treatments: in 2005, the most recent year for which global data are available, 56% of all ART cycle treatments took place in Europe, 23% in Asia and 15% in North America. Since many European countries are characterized by extremely low fertility, ARTs do not only represent a means to alleviate the suffering of infertile women and men, but also a political lever to increase fertility rates in Europe.

The use of ART varies considerably among European countries: although diagnostic and treatment services are currently available in all European countries, variation in the use of reproductive technologies indicates that there are substantial differences in access. To explore these differences, we will analyse data collected by the European IVF Monitoring Consortium (EIM) of the European Society of Human Reproduction and Embryology (ESHRE). Since 1997, the Consortium (EIM) has collected data on ARTs in different European countries, obtained from national registries or individual clinics. The data which we will briefly refer to, however, date back to the 2013 collection (the latest available) and were published in the 2017 ESHRE report. The survey looks at 38 out of 51 European countries. France (with 84,214 treatments), Spain (with 78,152), Germany (with 76,422), Italy (with 64,446) and the UK (with 61,728) are the countries, which have provided the most accurate collection of ART cycles data. France, Italy, Poland and the UK participate in monitoring with 100% of their infertility clinics.

In 2013, 686,271 treatment cycles were carried out in the aforementioned European countries (+ 7.2% compared to 2012).¹³ The percentage of children born through an ART fertilisation out of the total number of births in each country varies from 0.7% in Malta to 6.2% in Denmark; in Italy, the percentage is 1.9%. In total in 2013, 149,466 children were born through reproductive technologies in European countries (which equals 2.2% of total births). Eighteen out of twenty-two countries in which embryo donation is permitted declared they had carried out 4,378 embryo transfers, resulting in 1,594 pregnancies (36.4%).

,

⁹ Carlos Calhaz-Jorge et al, "Assisted reproductive technology in Europe, 2013: Results Generated from European Registers by ESHRE." *Human Reproduction* 32, no. 10 (2017) 1957–1973, accessed August 8, 2018, DOI: 10.1093/humrep/dex264.

¹⁰ Fernando Zegers-Hochschild et al., "International Committee for Monitoring Assisted Reproductive Technology. World Report on Assisted Reproductive Technology, 2005," *Fertility and Sterility* 101, no. 2 (2014): 366–378, accessed August 8, 2018, DOI: 10.1016/j.fertnstert.2013.10.005.

¹¹ Calhaz-Jorge et al., "Assisted Reproductive Technology in Europe," 81.

¹² Ibid.

¹³ Some countries have highlighted a considerable increase on the previous year in treatment cycles. Among these Greece (+130%), Lithuania (+120%), Kazakistan (+47%) and Croatia (+41%). Out of the total fresh cycles, (474,666) 30.4% were IVFs with embryo transfer and 69.6% Intra Cytoplasmic Sperm Injections (ICSI). 26 countries declare to have offered 323,508 treatment cycles with donor semen (5.5%) and all countries except Serbia, ddeclare they use frozen embryos. 26 countries out of 38 offer egg donor treatments—that equals 40,244 cycles in 2013.

The age of women starting ART treatments varies from country to country: the highest percentage of women over fourty who undergo IVF is to be found in Greece, Denmark and Hungary, while the highest percentage of women below thirty-five is found in Polish, Ukrainian and Belarusian clinics. The highest percentage of women over the age of fourty who undergo ICSI (Intracytoplasmic Sperm Injection) is to be found in Greece, Italy and Hungary: the age of women (and men) is a very important indicator of success in ART treatments.¹⁴ Another significant indicator is represented by pre-term and multiple pregnancies, which are one of the major risks of ARTs. The risk of severe preterm pregnancy (20-27 weeks of gestation) is 1.3% for single pregnancies, 2.9% for twins and 8.3% for triplets. The percentage of pregnancies resulting in childbirth is 87% for single births, 49% for twins and 11.7% for triplets. The number of embryos inserted into the uterus in order to produce a pregnancy is related to the data we have just referred to, and there is variability among countries in this respect: the tendency is to transfer a single embryo (quality indicator) to ensure greater safety and better health for the mother and the foetus. Scandinavian countries, Belgium, the Czech Republic and Austria show the highest percentage of SET (Single embryo-transfer), these being respectively about 75%, 53%, 57% and 51%. All other countries show percentages below 40%; Italian clinics transfer a single embryo into a uterus in 24% of cases, and two in 45.5% of cases.

Several studies have tried to explain the variations in ART recourse in different countries. Several factors have emerged, with the costs and accessibility of ARTs playing an important role. Belgium and Denmark are known for their generous reimbursement policies for couples and people undergoing ART treatments. A transnational study has shown evidence of a negative correlation between cost and use of reproductive technologies. This indicates that the accessibility to the treatment is an important factor not only for their use, but also for the use of safer technological practices. Standards and beliefs also seem to play an important role in the different use of ART: there is evidence of a positive association between the social convention of time and age in which to have children and the availability of reproductive technologies in European countries. Präg and Mills suggest that beliefs about the moral status of a fertilized egg - that is, if an embryo is considered to be human after fertilization - are associated with the use of ARTs: generally, in countries where this belief is less widespread, reproductive technologies are more widely used. 17

Laws, rules and reproductive rights in Europe

Another important factor determining the diversity in the use of ART is without a doubt the regulation of these technological practices. Europe is the only continent where the legal regulation of ARTs is widespread. In other countries which resort to reproductive technologies (India, Japan and the United States) ARTs are largely based on voluntary guidelines by single clinics. ART regulation is sometimes described as a new phenomenon, but in reality, in the realm of reproduction, there are a long history and many legislative battles. There are three main ways to regulate access to ART. First of all, it can be regulated by guidelines or sets of rules to be followed voluntarily. These guidelines are generally issued by professional organizations, such as associations of obstetricians and gynaecologists.

¹⁷ Patrick Präg and Melinda C. Mills, "Norms, Politics, and Assisted Reproductive Technology (ART) Policies. A Cross-National Comparative Analysis" (presentation, Annual Meeting of the Population Association of America, San Diego, 2015); Lombardi, Riproduzione e salute nella società globale, 90).

¹⁴ Lia Lombardi, Riproduzione e salute nella società globale. Genere, medicalizzazione e mutamento sociale (Santarcangelo di Romagna: Maggioli Editore 2018), 81.

¹⁵ Calhaz-Jorge et al., "Assisted Reproductive Technology in Europe," 1968.

¹⁶ Ibid.

¹⁸ Debora Spar, "Reproductive Tourism and the Regulatory Map," New England Journal of Medicine 352 (2005): 531–533, accessed August 8, 2018, DOI: <u>10.1056/NEJMp048295</u>.

Secondly, it can be regulated by government legislation, which sanctions those who violate the rules. Thirdly, access to ARTs can be regulated through insurance coverage: the high cost of infertility treatments and the level of coverage can be read as an indirect regulation of access to reproductive practices. However, since infertility is now considered a disability, infertile people should have a right to treatment. In all European countries, ARTs are regulated by law and in half of them government regulation is supplemented by voluntary guidelines (as is the case in Italy). The regulation of reproductive technologies is a prominent issue for governments, because public debate is often intense on these issues concerning social (health), personal (reproduction) and civil rights. The Italian case is emblematic in this respect: a legislative and civil process started at least ten years before Act 40 of 2004, and continued later with the 2005 referendum, which was followed by further battles resulting in two rulings by the Constitutional Court. These rulings abolished the ban to use donor gamete (ruling CC No. 162/2014) and the prohibition of pre-implantation diagnosis for people or couples affected by genetic transmissible diseases (ruling CC No. 96/2015).

With regard to the financial coverage for the treatment, Switzerland, Belarus and Ireland are the only countries that offer no coverage. Denmark, France, Hungary, Russia, Slovenia and Spain cover all expenses through their national health service: perhaps it is not a surprise that Denmark, Slovenia and Spain have a high recourse to ART. Other countries offer partial coverage of the cost. Other differences between European countries concern the requirements for access to ARTs: for example, Belgium, Bulgaria, Denmark, Finland, Latvia, Spain and the UK allow access to single and lesbian women; Greece, Hungary and Russia allow access exclusively to single women. Surrogacy is forbidden in Bulgaria, Finland, France, Germany, Italy, Malta, Norway, Portugal, Switzerland, Spain, Sweden and Turkey. All countries that allow surrogacy prohibit it as a commercial transaction, except for Ukraine and the Russian Federation.²⁰

The Italian ARTs legal and epidemiological context

During the 20th century a big change takes place, which relates to the possibility of intervening in the reproductive process, right at the beginning, that is during conception and the first stages of insemination. This encompasses a complex web of issues of a social, ethical, scientific, economic and legislative nature.²¹ We need to reflect on these practices and their impact on reproduction, on bodies and on relationships, but also on how they are interconnected with medical and political power and with morality. Let's first consider the Italian legislation on medically assisted procreation (L. 40/2004) and its article 1 which, indirectly, attributes juridical personality to the embryo and limits the decisional power of women and couples in relation to the embryo's survival at "all costs"; it thus values women's bodies not in their overall function of *maternage*, but in their biological function of "containers" for the embryo. ²² Is this not a way to establish social and political control over women's bodies?²³

Every draft law incorporates specific representations of the body: representations of men's bodies, of women's bodies and their reproductive functions, of the body of the child to be born, and

Invited Perspectives gender/sexuality/italy 5 (2018)

¹⁹ WHO and World Bank, World Report on Disability (Geneva: WHO, 2011)

²⁰ Calhaz-Jorge et al., "Assisted Reproductive Technology in Europe," 1960.

²¹ Lia Lombardi and Silvia De Zordo, eds., *La procreazione mediclmente assistita e le sue sfide. Generi, Tecnologie e Disuguaglianze* (Milano: FrancoAngeli, 2013).

²² According to Article 1 of Act 40/2004: in order to facilitate the solution of reproductive problems emerging from human sterility or infertility, recourse to medically assisted procreation is permitted, in accordance with the rules of this act of law, which ensures the rights of all concerned parties, including the embryo."

²³ Lia Lombardi, "Reproductive Technology in Italy Between Gender Policy and Inequality. Can We Speak of 'Social Infertility'?," *About Gender International Journal of Gender Studies* 5, no. 9 (2016): 6, accessed August 8, 2018, DOI: 10.15167/2279-5057/ag.2016.5.9.366.

representations of the boundaries and legality in the use of all these.²⁴ Similarly, art. 4 c. 3 in the same Act bans gamete donation, although a recent judgment by the Constitutional Court has declared this article illegal. Therefore, according to the above article, gamete donation is now allowed, but in fact it is still difficult for couples living in Italy to resort to it; art. 5 states that only stable couples (adult and heterosexual) may have access to ART. It is therefore evident that the rules indicate and mark the practices and representations of parenthood and family structure. Moreover, Act 40/2004 creates the National Register of Medically-Assisted Procreation (NRMAP), which annually collects anonymous data for treatment cycles, therapeutic protocols, results and follow-ups of pregnancies and new-borns. The introduction of NRMAP is considered a success in the Italian context because it provides data and useful information on MAP-ART.²⁵

Another important measure implemented by Act 40/2004 is the promotion of reproductive health through the prevention of infertility and the provision of accurate information to women and couples who undergo assisted reproductive technologies. It also aims to promote information campaigns by launching an action plan called "National plan for the prevention of infertility." In 2015 the Italian Assisted Reproductive Technology Register (IARTR 2017) collected data from 366 infertility centres, 138 (46%) of which are public and 228 (54%) private, with a varied distribution over the national territory. During that year, 74,292 couples were treated; 95,110 (2,800 by donor) cycles of ovarian stimulation were performed and 12,836 (601 by donor) live births resulted (2.6% out of the total of childbirths in 2015). Regarding the age of the men and women resorting to ART, the mean age is 35.2 for women (34.7 being the European mean age) and 39.5 for men. The highest number of initiated cycles occurs in the 30-39 year range, which is in line with the average age for having the first child in Italy.²⁶

One of the factors not clearly defined in the IARTR report (2017) is the age of people who undergo assisted reproduction. While the relationship between the woman's age and the success of reproductive techniques is always highlighted and interpreted, this relationship has never been investigated with regard to the male partner. Several recent studies have revealed that age also impacts on male fertility, which begins to decline after the age of 35, while also increasing the risk of births with genetic or chromosomic diseases: despite this, the relationship between male age and infertility is not yet recognised by either medical practice or the socio-cultural context.²⁷ In other words, these studies should contribute to the deconstruction of the stereotype that "men are always fertile" and

²⁵ Since 1978, the year that marked the birth of Louise Brown and the beginning of the "reproductive technologyadventure," the most commonly used definition has been "New Reproductive Technology" (NRT). Later the term "Assisted Reproductive Technologies" (ARTs) was introduced and the two acronyms have remained largely in use in English-speaking countries, where "neutral" terms such as "technology" and "reproduction" are preferred. In Mediterranean countries, with Latin-rooted-languages, the term "Medically Assisted Procreation," is instead commonly used. As often happens, the terminology tends to hide some reality and to eliminate or to assimilate a fundamental part of the identity of gender experience, such as the complexity of women's bodies. In this paper we mainly use the ART achronym. Lia Lombardi and Silvia De Zordo, introduction to *La procreazione mediclimente assistita e le sue sfide. Generi, Tecnologie e Disuguaglianze,* eds. Lia Lombardi and Silvia De Zordo (Milano: FrancoAngeli, 2013), 26-27.

²⁴ Paola Borgna, ed., *Corpi in azione* (Torino: Rosemberg e Sellier, 1995), 66.

²⁶ Lia Lombardi, "The Medicalization of Infertility. Men's Discourse between Marginalisation and Reproduction," *Salute e Società* XVII, no. 2 (2018): 56-71, accessed August 8, 2018, DOI: <u>10.3280/SES2018-002005</u>.

²⁷ Lindsey E. Crosnoe and Edward D. Kim, "Impact of Age on Male Fertility," *Current Opinion in Obstetrics and Gynecology* 25, no. 3 (2013): 181-185, accessed August 8, 2018, DOI: 10.1097/GCO.0b013e32836024cb; Matthieu Rolland et al., "Decline in Semen Concentration and Morphology in a Sample of 26,609 Men Close to General Population Between 1989 and 2005 in France," *Oxford Journals Medicine Human Reproduction* 28, no. 2 (2012): 462-470, accessed August 8, 2018, DOI: 10.1093/humrep/des415; Harry Fisch and Stephen Braun, *The Male Biological Clock: The Startling News About Aging, Sexuality, and Fertility in Men* (New York: Simon and Shuster Inc, 2008); Mohamed A.M. Hassan and Stephen R. Killick, "Effect of Male Age on Fertility: Evidence for the Decline in Male Fertility with Increasing Age," *Fertility and Sterility* 79, no. 3 (2003): 1520-1527, accessed August 8, 2018, DOI: 10.1016/S0015-0282(03)00366-2.

that they can conceive throughout their life.²⁸

"Cross border reproductive care"

All differences and restrictions described above are often the basis for the so-called "procreative tourism", the correct definition of which is "Cross-Border Reproductive Care." This concept refers to couples or individuals who seek assisted reproductive treatment in a country other than the one in which they reside. Although professionals, patients and policymakers seem to be aware of this phenomenon, there is little empirical research on its actual scope. The most extensive study on "cross-border" patients in Europe was conducted between 2008 and 2009 by Shenfield and colleagues.²⁹ The researchers examined all non-resident women undergoing treatment in 44 fertility clinics in Belgium, the Czech Republic, Denmark, Switzerland, Slovenia and Spain.

The main countries of origin of those women seeking ART assistance were Italy (32%), Germany (15%), the Netherlands (12%) and France (9%). The geographical and cultural proximity is a driving force in the country of care: most Italians go to Spain and Switzerland, most Germans travel to the Czech Republic, Dutch and French women usually go to Belgium, while Norwegians and Swedes travel to Denmark. This survey attempts a cautious estimate of the number of patients and treatment cycles carried out abroad between 2008 and 2009. The estimate refers to 11,000 to 14,000 patients and 24,000 to 30,000 treatment cycles in the six aforementioned countries. In their comparative study of patients seeking treatment abroad, Shenfield and colleagues show that variations in the legislation of different countries are important factors for "transnational fertility care." Between 57% and 80% of patients from Italy, Germany, Norway, France and Sweden report that legal restriction is one of the most important reasons for seeking fertility treatment abroad. On the contrary, only 32% of patients from the Netherlands and 9% of patients from the UK mention legal barriers. However, 53% of patients from the Netherlands report that they went abroad to get higher standard treatments (compared to an average of 43% for the six countries surveyed). 34% of patients from the UK state that they went abroad because of the difficult in access (compared to an average of 7% for the six countries surveyed).

The ESHRE report (2013) refers to twelve countries which have provided data on cross-border patients: Albania, Belarus, Denmark, Iceland, Lithuania, Malta, Moldova, Poland, Portugal, Slovenia, Spain and Switzerland. Patients report that the main reasons for travelling abroad is the ban on some ART practices in their countries' legislation (36.9%) and the demand for better quality and effectiveness of treatments (28.6%).³⁰

Reproductive inequality

"Cross border reproductive care" raises some ethical, social and political issues that affect equity and social justice. Firstly, travel abroad by infertile couples highlights the disparity between wealthy countries and their expensive and safe clinics and cheap treatments in other countries where the clinics and operators cannot guarantee treatment safety and success. In addition, we need to draw attention to a significant "eggs market": from Spanish students and young American women recruited for 5,000 Euros through internet advertisements - to the "unlucky" Ukrainian and Romanian women who put their health at serious risk in exchange for a few hundred Euros. In that respect, in 2005 the European

_

²⁸ Lombardi, "The Medicalization of Infertility," 63.

²⁹ Françoise Shenfield et al., "Cross-border Reproductive Care in Six European Countries," *Human Reproduction Update* 25, no. 6 (2010): 1361, accessed August 8, 2018, DOI:10.1093/humrep/deq057.

³⁰ Lombardi, Riproduzione e salute nella società globale, 93.

Parliament intervened with a joint resolution on the trade in human egg cells where it stated that the Union "enshrines the prohibition on making the human body and its parts a form of profit" and invites EU members to "intensify care and strengthen the alternatives for prevention and infertility treatments."³¹

In the 1980s, when public debate on New Reproductive Technology (NRT) started to spread in several areas of the world, the feminist reflection already feared the exploitation of women's bodies in their reproductive organs and functions.³² An exploitation that would have added social and gender inequalities to those already existing; a sort of circularity of the increasingly global inequality that adds to the market of prostitution, of caregivers, of housekeepers and to the trafficking of asylum seekers and refugees.³³ Reproductive technology, based on a market structure, contributes to the fact that the body's parts are not only subject to medical manipulation, but also "tradable." This way of managing ARTs defines the role of women's body as one of reproduction: it supplies eggs for researchers, a uterus for implantation and gestation, and surrogate mothers to clone the "superior genotype." 34 These reflections, which at the time appeared to be exaggerated and catastrophic, are today becoming a documented reality on which a serious reflection must start: adequate measures of intervention must be considered, taking into account the different access of women to reproductive control in terms of social inequality based on "race," class, age, gender and religion. As Wendy Chavkin and Jane Maree Maher underline in their book The Globalization of Motherhood, the "globalization of motherhood," both biological and social (e.g. flows of gametes, embryos, child adoption, babysitters, potential parents, etc.) crossing every day around the globe opens up new possibilities and it could have liberating effects for individuals and couples.³⁵ However, at the same time it reinforces and reproduces the existing social and gender inequalities. Let us add that the globalization of motherhood has gone hand in hand with the second demographic transition, characterized by the general fertility decline which, in "developed" countries, is due to parenthood postponement and, consequently, having children later in life. This results in an increase in the number of infertility cases due to advanced age and consequently in an increased demand for, and use of, ARTs, which is strictly linked to an impressive medical-technological offer.³⁶

In such a context, reproductive technology in itself is neither good nor bad, but it highlights the inequalities, tensions, contradictions and paradoxes present in our society and democracy. It could also be an opportunity to reflect on the different aspects of reproduction—biological, social, cultural and political: this could culminate in a return to the discussion of the fundamental rights, such as sexual and reproductive rights, and citizenship and civil rights, which we hope can be increasingly extended to all people and social groups, as already stated in several International Conferences —from Cairo (1994) to Beijing (1995) and others.

³¹ Lombardi, Riproduzione e salute nella società globale.

³² Lesley Doyal, "Infertility – A life sentence? Women and National Health Service," in *Reproductive Technologies*, ed. Michelle Stanworth (Cambridge: Polity Press, 1987), 174-191; Jane Murphy, "Egg Farming and Women's Future," in *Test-tubewomen*, eds. Rita Arditti, Renate Duelli Klein and Shelley Minden (London: Pandora Press, 1984), 68-75; Anne Oakley, *The Captured Womb* (London: Blackwell, 1984); Michelle Stanworth, ed., *Reproductive Technologies: Gender, Motherhood, and Medicine* (Minneapolis: University of Minnesota Press, 1987).

³³ Barbara Ehrenreich and Arley Hochschield, eds., *Donne globali, Tate, Colf e Badanti* (Milano: Feltrinelli, 2004); Lia Lombardi, "Violence Against Refugee and Migrant Women. The Reproduction of Gender Discrimination and Inequality" (presentation, Fondazione ISMU Conference, Milan, 2017), accessed August 8, 2018, http://www.ismu.org/2017/05/violence-against-refugee-and-migrant-women/.

³⁴ Gena Corea, The Mother Machine: Reproductive Technologies from Artificial Insemination to Artificial Wombs. (New York: Harper & Row, 1985); Lombardi, Riproduzione e salute nella società globale, 94.

³⁵ Wendy Chavkin and Jane M. Maher, eds., *The Globalization of Motherhood* (London & New York: Routledge, 2010).

³⁶ Lombardi, Riproduzione e salute nella società globale.

Social egg freezing: a new challenge

In recent years, a new challenge for human reproduction has been launched in the global and local social arena. The "frozen oocyte replacement" is a technique by which the cryopreserved oocytes are fertilized after thawing and then transferred to the uterus. This technique offers women the chance to have genetically related children later in life. The replacement of frozen oocytes was first used in cancer patients, who recovered and had their oocytes frozen before undergoing chemotherapy or radiation therapy, which could have damaged their ovaries. Since this technique can also be used to delay motherhood for any reason (including pursuing a professional career), in recent years it has attracted considerable attention by public and medical staff, and it is now known as "social egg freezing." Big companies, like Facebook and Apple, have recently made this technique available to young female employees, offering them up to \$ 20,000 to cover the cost of egg freezing.³⁸

"Social egg freezing" is now an Italian reality too. At national level there are already about 40 public and private centres for the cryopreservation of female oocytes. In the Italian context, characterised by a very low fertility rate (see the next section) the "social egg freezing" proposal would seem to respond to the motherhood postponement of Italian women: as usual, fatherhood postponement is not considered.³⁹ In actual fact, the inclusion of the term "social" seems to denote a precise intention to promote this new technique, which is a medical solution to an evident social problem and to its effects and causes (demographic decline and population ageing). "Social egg freezing" is a practice offered (for a fee) to young women employed in higher education, pursuing a professional career or looking for a qualified job; they run the risk to get past the age of forty without having been able to engage in a parental project. The technique consists in freezing the oocytes of a young woman who will be able to access them later (when and if she will ever want), in order to start a pregnancy.

Nevertheless, this medical-technological offer does not take into account either biological factors (for example the oocytes of a young body inserted, after years, in a less young body), or the relational and social factors linked to a big generational gap. Therefore the question is: what procreative and parenting choice is offered to women and men? Perhaps, that of being trapped in an unskilled and precarious job, in an inconclusive well-being, in the difficulty of building stable emotional bonds, but with the futuristic opportunity to freeze their eggs so that one day they may perhaps attempt a pregnancy? And what chance of success will they have?

Once again, a medical-clinical response is offered to an evident social problem: but a society that does not want, or is not able, to build favourable conditions for women and men to become parents at a young and reproductive age, without having to renounce their education and professional career, is perhaps a "sick" and "infertile" society. 40 If the choice of freezing eggs at 25-30 years of age and to defrost them at the age of 40 or 50 years is forced by unfavourable social conditions, then we cannot speak of "free choice" but rather of a choice that goes against women and not to their benefit. The risk is that "social egg freezing" may reproduce the "illness" of society and its institutions on women' bodies. It would be a new form of control of productive and reproductive bodies, both women and men's. Therefore, we believe that social problems should receive "social care" provided

³⁷ Heidi Mertes and Guido Pennings, "Social Egg Freezing. For Better, Not for Worse," Reproductive Biomedicine Online 23 (2011): 824, accessed August 8, 2018, DOI: <u>10.1016/j.rbmo.2011.09.010</u>.

³⁸ Marc Tran, "Apple and Facebook offer to freeze eggs for female employees." *The Guardian*, October 15, 2014, accessed August 8, 2018, https://www.theguardian.com/technology/2014/oct/15/apple-facebook-offer-freeze-eggs-female-employees.

³⁹ Lombardi, "The Medicalization of Infertility," 63.

⁴⁰ Lombardi, Riproduzione e salute nella società globale, 86.

by policies, services, parenting and children support. This confusion between social and medical fields can lead to social, reproductive and health inequality and reinforce biological determinism.⁴¹

Social and family change in the Italian context

To conclude this article it is worth reflecting briefly on the Italian socio-political context in which the new reproductive challenges we have discussed are triggered.

ARTs develop in a socio-cultural context of considerable changes that affect not only health and care, but also relationships between genders and generations, the different ways of being in a couple and starting a family. From the social and relational point of view, the current historical phase is characterized by a strong tension between tradition and change that has redesigned the boundaries of gender identity and of life courses. According to the most recent data from ISTAT (the national institute for statistics), there has been a significant decrease in marriages (around 50%) since the 1970s (45 thousand marriages less between 2004 and 2016); a constant increase in the age at marriage (on average 32 years for women and 35 for men) and in the age at which people have children. Single-parents and unmarried couples have doubled since 2007 and we have witnessed the emergence of homoparenthood families and of homosexual people and couples who travel to foreign clinics in order to realize their parenthood desire.⁴²

The age people have children is directly connected to these changes: in Italy, this happens later, with the country only preceding Spain and Ireland in the European rank. Parenthood postponement is mainly due to several factors related to social rather than clinical problems, such as: a) young people's difficulty to become economically independent from their family (in 2014 68.8% of males and 57.7% of females between 18 and 34 years of age lived with at least one parent); b) the difficulty in balancing family and work responsibilities and commitments; c) women's work overload; d) unstable and precarious working conditions. With regard to female employment, Italy is second only to Malta in the European context and the low employment rate of Italian women (49% in December 2017 compared to 67.2% for men) is worse for mothers: in the labour market, 100% of women without children are employed, while the percentage for women with children is 70; 41% of women with casual or non-permanent jobs are mothers. A significant unequal distribution of domestic and family work persists in Italy: within a couple, 76% of family work is carried out by women, even when they are employed and have children, with this rate almost unchanged in the last twenty years.

Following from the observation of these social and relational dynamics, which are not excluded from welfare policies and the support for parenting and childcare, we suggest that, in addition to the medical factors that determine infertility, there are many other social factors that influence each other. For this reason, we can talk about a "social infertility," which cannot be separated from the socio-political context.⁴³

⁴¹ Peter Conrad, "The Shifting Engines of Medicalization," *Salute e Società* VIII, no. 2 (2009): 31-48, accessed August 8, 2018, DOI: 10.3280/SES2009-EN2004.

⁴² Giulia Zanini, Riproduzione transnazionale: single e coppie omosessuali in viaggio verso la genitorialità, in La procreazione medicalmente assistita e le sue sfide. Generi, Tecnologie e Disuguaglianze, eds. Lia Lombardi and Silvia De Zordo (Milano: FrancoAngeli, 2013), 167-177; Corinna S. Guerzoni, "Surrogacy Arrangement: Choices and Matches between "Third Parties' and Italian Gay Fathers," Salute e Società XVII, no. 2 (2018): 106-118, accessed August 8, 2018, DOI: 10.3280/SES2018-002008; Alice S. Sarcinelli, "Regulation and Un-regulation of LGBT Reproductive and Parenting Rights: the Case of Italy and Belgium," Salute e Società XVII, no. 2 (2018): 90-105, accessed August 8, 2018, DOI: 10.3280/SES2018-002007.

⁴³ Sara Franklin, "Reconstituting Reproductivity: a tale of IVF into two halves" (presentation, International Conference "(In)FERTILE CITIZENS. Anthropological and Legal challenges of Assisted Reproduction Technologies," Lesvos, May 28-30, 2015); Lombardi, "Reproductive Technology in Italy between Gender Policy and Inequality," 16.

Works Cited

- Borgna, Paola, ed. Corpi in azione. Torino: Rosemberg e Sellier, 1995.
- Braidotti, Rosi. Madri, mostri, macchine. Roma: Manifesto Libri, 1996.
- Calhaz-Jorge, Carlos, Claire De Geyter, Markus S Kupka, Jacques de Mouzon, Karin Erb, Edgar Mocanu, Tatjana Motrenko, Giulia Scaravelli, Christine Wyns. "Assisted reproductive technology in Europe, 2013: results generated from European registers by ESHRE." Human Reproduction 32, no. 10 (2017): 1957–1973. Accessed August 8, 2018. DOI: https://academic.oup.com/humrep/article/32/10/1957/4096426.
- Chavkin, Wendy and Jane M. Maher, eds. The Globalization of Motherhood. London & New York: Routledge, 2010.
- Conrad, Peter. "The Shifting Engines of Medicalization." Salute e Società VIII, no. 2 (2009): 31-48. Accessed August 8, 2018. DOI: 10.3280/SES2009-EN2004.
- Corea, Gena. The Mother Machine: Reproductive Technologies from Artificial Insemination to Artificial Wombs. New York: Harper & Row, 1985.
- Crosnoe, Lindsey E. and Edward D. Kim. "Impact of Age on Male Fertility." Current Opinion in Obstetrics and Gynecology 25, no. 3 (2013): 181-185. Accessed August 8, 2018. DOI: 10.1097/GCO.0b013e32836024cb.
- Doyal, Lesley. "Infertility A life sentence? Women and National Health Service." In Reproductive Technologies, edited by Michelle Stanworth, 174-191. Cambridge: Polity Press, 1987.
- Ehrenreich, Barbara and Arley Hochschield, eds. Donne globali, Tate, Colf e Badanti. Milano: Feltrinelli, 2004.
- Fisch, Harry and Stephen Braun. The Male Biological Clock: The Startling News About Aging, Sexuality, and Fertility in Men. New York: Simon and Shuster Inc, 2008.
- Franklin, Sara. "Reconstituting Reproductivity: a tale of IVF into two halves." Paper presented at the International Conference "(In)FERTILE CITIZENS. Anthropological and Legal challenges of Assisted Reproduction Technologies" Lesvos, 28-30 May, 2015.
- Haraway, Donna. Manifesto Cyborg. Donne, tecnologie e biopolitiche del corpo. Milano: Feltrinelli, 1995.
- Guerzoni, Corinna S. "Surrogacy Arrangement: Choices and Matches between 'Third Parties' and Italian Gay Fathers." Salute e Società XVII, no. 2 (2018): 106-118. Accessed August 8, 2018. DOI: 10.3280/SES2018-002008
- Hassan, Mohamed A.M and Stephen R. Killick. "Effect of Male Age on Fertility: Evidence for the Decline in Male Fertility with Increasing Age." Fertility and Sterility 79, no. 3 (2003): 1520-1527. Accessed August 8, 2018. DOI: .
- IARTR. Executive Summary for 2015. Monitoring the Activity and Outcomes of Italian ART Centers in 2015. Rome: Istituto Superiore di Sanità, 2017. Accessed August 8, 2018.http://old.iss.it/binary/rpma/cont/EXECUTIVE SUMMARY of ART in ITALY Activity 2015.pdf
- Lombardi, Lia, and Silvia De Zordo, eds. La procreazione mediclmente assistita e le sue sfide. Generi, Tecnologie e Disuguaglianze. Milano: FrancoAngeli, 2013.
- Lombardi, Lia. "Reproductive Technology in Italy Between Gender Policy and Inequality. Can We Speak of 'Social Infertility'?" About Gender. International Journal of Gender Studies 5, no. 9 (2016): 1-20. DOI: .

- ---. "Violence Against Refugee and Migrant Women. The Reproduction of Gender Discrimination and Inequality." Paper presented at Fondazione ISMU Conference, Milan, 2017. Accessed August 8, 2018 http://www.ismu.org/2017/05/violence-against-refugee-and-migrant-women/.
- ---. Riproduzione e salute nella società globale. Genere, medicalizzazione e mutamento sociale. Santarcangelo di Romagna: Maggioli Editore 2018.
- ---. "The Medicalization of Infertility. Men's Discourse between Marginalisation and Reproduction." *Salute e Società* XVII, no. 2 (2018): 56-71. Accessed August 8, 2018. DOI: 10.3280/SES2018-002005.
- Mertes, Heidi and Guido Pennings. "Social Egg Freezing. For Better, Not for Worse." Reproductive Biomedicine Online 23 (2011): 824–829. Accessed August 8, 2018. DOI: 10.1016/j.rbmo.2011.09.010
- Murphy, Jane. "Egg Farming and Women's Future." In *Test-tube women*, edited by Rita Arditti, Renate Duelli Klein and Shelley Minden, 68-75. London: Pandora Press, 1984.
- Oakley, Anne. The Captured Womb. London: Blackwell, 1984.
- Piga, Antonella. "Leggi e norme sulla PMA: il panorama legislative europeo." In *La procreazione medicalmente assistita e le sue sfide. Generi, Tecnologie e Disuguaglianze,* edited by Lia Lombardi and Silvia De Zordo, 111-128. Milano: FrancoAngeli, 2013.
- Präg, Patrick and Melinda C. Mills. "Norms, Politics, and Assisted Reproductive Technology (ART) Policies. A Cross-National Comparative Analysis." Paper presented at the Annual Meeting of the Population Association of America, San Diego, 2015.
- Rolland, Matthieu, Joëlle Le Moal, Vérène Wagner, Dominique Royère and Jean De Mouzon. "Decline in Semen Concentration and Morphology in a Sample of 26,609 Men Close to General Population Between 1989 and 2005 in France." Oxford Journals Medicine Human Reproduction 28, no. 2 (2012): 462-470. Accessed August 8, 2018. DOI: 10.1093/humrep/des415.
- Sarcinelli, Alice S. "Regulation and Un-regulation of LGBT Reproductive and Parenting Rights: the Case of Italy and Belgium." *Salute e Società* XVII, no. 2 (2018): 90-105. Accessed August 8, 2018. DOI: 10.3280/SES2018-002007.
- Shenfield, Françoise, Jean de Mouzon, Guido Pennings, Anna Pia Ferraretti, Anders Nyboe Andersen, Guido de Wert and Veerle Goossens. "Cross-border Reproductive Care in Six European Countries." *Human Reproduction Update* 25, no. 6 (2010): 1361–1368. Accessed August 8, 2018. DOI:10.1093/humrep/deq057.
- Spar, Debora. "Reproductive Tourism and the Regulatory Map." New England Journal of Medicine 352 (2005): 531–533. Accessed August 8, 2018. DOI: 10.1056/NEJMp048295.
- Stanworth, Michelle, ed. Reproductive Technologies: Gender, Motherhood, and Medicine. Minneapolis: University of Minnesota Press, 1987.
- Tran, Marc. "Apple and Facebook offer to freeze eggs for female employees." *The Guardian*, October 15, 2014. Accessed August 8, 2018.

 http://www.theguardian.com/technology/2014/oct/15/apple-facebook-offer-freezeeggs-female-employees.
- WHO and World Bank. World Report on Disability. Geneva: WHO, 2011.
- Zanini, Giulia. Riproduzione transnazionale: single e coppie omosessuali in viaggio verso la genitorialità. In La procreazione medicalmente assistita e le sue sfide. Generi, Tecnologie e Disuguaglianze, edited by Lia Lombardi and Silvia De Zordo, 167-177. Milano: FrancoAngeli, 2013.
- Zegers-Hochschild, Fernando, Rostami Mansour, Osamu Ishihara, G. David Adamson, Jacques de Mouzon, Karl-Gösta Nygren. "International Committee for Monitoring Assisted Reproductive Technology. World Report on Assisted Reproductive Technology, 2005."

Fertility and Sterility 101, no. 2 (2014): 366–378. Accessed August 8, 2018. DOI: 10.1016/j.fertnstert.2013.10.005.